REMARKS

It is noted that this application had been accorded "special status" by the Office in response to Applicants petition due to the fact that there is an infringing product on the market. Claims 76, 79, 81, 83, 86, 87, 89, 91, and 93–96 remain pending in the present application. Claims 76, 79, 83 and 86 have been amended to clarify the nature of the polyolefin fibers having cross-sectional areas of less than about 75 μm^2, to specify that the polyolefin used for those fibers does not contain a fluorocarbon additive. No new matter is added.

Interview Summary

Applicants would like to thank the Examiner for providing the opportunity to discuss the attached amendment in a personal interview, conducted on 5 May 2005. During the interview, Applicants discussed the propriety of inserting the negative limitation into the independent claims that excludes the inclusion of a fluorocarbon additive in the polymer of the fibers having cross-sectional areas of less than about 75 μm^2. Likewise, Applicants discussed the meaning of the claim limitation to the "same, single polymer", and provided the Examiner with copies of various documents to that effect, attached hereto. Applicants also supplied the Examiner with a copy of the IDS filed 3 May 2005, and non-patent literature cited therein.

Subsequent to the interview, on 6 May 2005, the Examiner telephoned Applicants' representative to further discuss the proposed amendment. The Examiner indicated that she deems the amendment to represent "new matter", in spite of the indication of the permissibility of such an amendment in MPEP 2173.05(i), set forth below. The Examiner indicated that she chooses to interpret *In re Johnson* (citation below) as being limited to the facts of the case, rather than interpret it more broadly as the PTO has set forth in MPEP 2173.05(i).

The Examiner further questioned the basis in the application-as-filed for the inclusion of a meltblown fiber layer in claims 81 and 87.

Amendment Contains No New Matter

Applicants respectfully submit that the amendment to the claims does not represent new matter and is perfectly permissible under the patent law. In this

regard, the Examiner's attention is directed to the MPEP at section 2173.05 (i), wherein it is stated:

> [A] lack of literal basis in the specification for a negative limitation may not be sufficient to establish a *prima facie* case for lack of descriptive support. *Ex parte Parks*, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993).

In the present case, Applicants respectfully submit that the Examiner's determination that the amendment submitted herewith lacks basis is insufficient to establish a *prima facie* case for lack of descriptive support. The MPEP further states:

> Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See *In re Johnson*, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977)... (Emphasis added).

In this regard, Applicants direct attention to the specification at page 16, lines 11 et seq., wherein Applicants have listed a number of "attractive alternatives": The fiber polymer may be blended with pigments (line 13), fluorocarbons (line 16), antimicrobials (line 17), ultraviolet stabilizers (lines 18-20), additives for discharging static electricity (lines 20-22) and wetting agents (lines 22-23). See also original claims 25-29 and 49-51 (pp. 20 and 23), wherein Applicants respectively disclose adding fluorocarbons to the polymers of a sheath/core fiber and to the fibers generally. Clearly these additives are disclosed as alternative elements, per MPEP 2173.05 (i).

Further, MPEP 2173.05 (i) states:

> ("[the] specification, having described the whole, necessarily described the part remaining."). See also *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983), *aff'd mem.*, 738 F.2d 453 (Fed. Cir. 1984). (Emphasis added).

Applicants have indeed "described the whole" in the present specification, i.e. a list of suitable additives that may be blended with the fiber polymers, and thus have described "the part remaining".

The Examiner's attention is further directed to Applicants' use of permissive language to describe the inclusion of the various additives, to wit:

> ...a hydrophobic material such as a fluorocarbon may also be spun into the sheath polymer..." (page 16, lines 15-17; emphasis added).

Clearly the use of the word "may" indicates to those skilled in the art that the inclusion of a fluorocarbon additive is permissible, but not necessary; i.e. a fluorocarbon may be added, but it also may not be added. As such, according to MPEP 2173.05 (i) and In re Johnson, these alternatives may be excluded without adding "new matter", as both inclusion and exclusion of the same are fully described.

Basis for the inclusion of a meltblown fiber layer in the present invention is noted at a number of places throughout the as-filed specification: Applicants describe SMS fabrics as conventional in the art (page 2, lines 1-17); Applicants suggest the use of the presently claimed invention with meltblown layers (page 9, lines 14-21). Accordingly, Applicants submit that the inclusion of a meltblown fiber layer in the present invention is fully described within the specification-as-filed.

No new matter has been added.

Rejection under 35 U.S.C. §§102(b) or 103(a) over Perkins et al.

Claims 76, 79, 81, 83, 86, 87, 91, and 93-96 stand rejected under 35 U.S.C. §102(b) as anticipated by, or in the alternative under §103(a) as obvious over Perkins et al. (U.S. Patent No. 5,178,932). Applicants traverse these bases of rejection and respectfully request reconsideration and withdrawal thereof.

Applicants essentially agree with the Examiner's characterization of the teachings of Perkins et al. as set forth at item 4 of the outstanding Office Action (pp. 4-6). However, Perkins et al. disclose SMS fabrics that invariably contain a fluorocarbon additive in the meltblown layer thereof.

> The microfibers of the second nonwoven web are prepared from a mixture of an additive and a second thermoplastic polymer, which additive imparts alcohol repellency to the surfaces of the microfibers. (Abstract)...
>
> Alcohol-repellent additives typically are fluorine-containing materials. Examples of fluorine containing materials are the following: (col. 7, lines 55-57).

Perkins et al. then disclose a number of suitable, fluorine-containing additives 'A through M' at column 7, line 59, bridging to col. 8, line 68. No other "alcohol-repellent" additives are disclosed or suggested by Perkins et al. and accordingly, Perkins et al. is not enabling for any other "alcohol-repellent" additives besides fluorocarbon additives.

According to the present claims, the polyolefin used to spin the fibers having cross-sectional areas of less than about 75 μm^2 do not contain a fluorocarbon additive. As such, Perkins et al. cannot anticipate the present claims.

Further, Perkins et al. provide no motivation to exclude such fluorocarbon additives and as such cannot be said to have made obvious the present claims; and since the addition of fluorocarbon additives to the polymers of Perkins et al.'s meltblown fibers is the crux of their invention, to exclude those additives would destroy the functioning of the Perkins et al. invention. As such, the skilled artisan would not have been motivated to so modify Perkins et al.

Withdrawal of the rejections over Perkins et al. is respectfully requested.

Rejection under 35 U.S.C. §103(a) over Ofosu et al. in view of McAmish et al.

Claims 76, 79, 81, 83, 86, 87, 91, and 93-96 stand rejected under 35 U.S.C. §103(a) as obvious over Ofosu et al. (U.S. Patent No. 6,268,302) in view of McAmish et al. (U.S. Patent No. 4,908,163). Applicants traverse this basis of rejection and respectfully request reconsideration and withdrawal thereof.

Applicants reiterate their comments in traverse of the rejection over Ofosu et al. in view of McAmish, as set forth in their previous responses, and in their initial comments in the Request for Continued Examination, filed March 30, 2005. To summarize, Applicants pointed out that Ofosu et al. disclose the use of fiber webs made from two different polyolefin polymers that have different melt flow rates. In

contrast thereto, the presently claimed invention expressly requires multiple fiber layers made of the same, single polymer, such as disclosed in Examples 41 and 42 of the present application, wherein identical plies of polypropylene fabrics of Examples 38-40 are combined (pages14-15). McAmish was merely cited as disclosing the application of a fluorochemical coating to a nonwoven fabric, but McAmish in no way compensates for the failure of Ofosu et al. to disclose or suggest the use of multiple fiber layers made of the same, single polymer. Thus, the combination of Ofosu et al. and McAmish fails to make out a proper, *prima facie* case of obviousness.

In response to Applicants' arguments, the Examiner asserts that, in spite of the fact that Ofosu et al. clearly disclose the use of polypropylenes having differing melt flow rates, the polypropylene polymers of Ofosu et al. are "the same, single polymer" and as such are within the scope of the present claims. In support of her arguments, the Examiner states:

> [T]he polypropylene polymers used by the Ofosu reference do read on the term "same, single polymer" in the context described by Applicants' Specification in which the polymer would be readily recycled back to constituent monomer...The fact that Ofosu et al. uses polypropylene with different melt-flow rate[s] in the different layers does not make the material different from the "same, single polymer" as defined in the present invention since the constituent monomer of polypropylene is propylene regardless of the melt-flow rate of the polymer. (Office Action, page 3).

Applicants traverse the Examiner's findings for several reasons. First, while Applicants express a preference for use of the same, single polymer such that the medical fabrics formed therefrom can be recycled into constituent monomer, as cited by the Examiner, Applicants respectfully submit that those skilled in the recycling art would know that polyolefins are not broken down into their constituent monomers for recycling. The constituent monomers of, for example, polyethylene and polypropylene are ethylene and propylene respectively, both gases, the formation of which from polymer would be energy- and cost-intensive, thus eliminating the incentives for recycling, even if it would be possible to completely break down those polymers to their constituent monomers. As evidence to support their argument, Applicants submit herewith a printout of "Plastics Recycling: What makes sense?"

from E.B. Nauman & Associates (**www.ebnauman.com/recycle1.htm**), which states:

> Pyrolysis is a process for decomposing plastics, in the absence of air, into usable gases, oils, and coke...The economics are terrible as is the energy efficiency. Those readers familiar with the petrochemical industry will recognize that cracking natural gas liquid is easier than cracking naptha, that cracking crude is not fully commercial and that cracking plastics is an abomination. Better they be burned! (E.B. Nauman, page 1 of 2; emphasis added).

Instead, polyolefins are generally recycled as polymer, and not broken down to their constituent monomers.

> Plastics recycling can take two forms: the reclaimed plastics can be used for applications not typical of virgin plastics or they can replace virgin plastics. The first form has not been an economic success, although new, high-value applications may yet be found. The second form is the only valid one for an environmentalist. Recycled plastics must displace virgin polymers. To do this they must have properties that closely approach those of virgin polymers and have prices less than those of virgin polymers. This has proven a difficult but not impossible goal. (E.B. Nauman, page 1, bridging to page 2; emphasis added).

E. B. Nauman continues by listing the required characteristics for recycling plastics:

- They should be free from point-to-point variations in molecular weight.
- The average molecular weight should be controllable. (Page 2).

Those skilled in the art are well aware that a polymer's molecular weight is proportional to its melt-viscosity. As evidence in support of this position, Applicants submit herewith a partial copy of "Packaging Materials: 3. Polypropylene as a Packaging Material for Foods and Beverages", Philip Tice, © 2002 International Life Sciences Institute, pp 5-6; **http://europe.ilsi.org/file/3-RPPM3Polyprop.pdf**), which discusses different grades of polypropylene and indicates:

> Melt-viscosity, which correlates with the weight-average molecular weight of the polymer, is used to select the grade appropriate for the specific process. Standardised melt-flow rate (MFR) tests are normally

> used to provide the information. Polymer grades with low MFR values (high molecular weight) are used in sheet extrusion, for subsequent thermoforming processing and also for blow moulding. Films are manufactured from intermediate grades, and grades with the higher MFR values are used for injection moulding (citations omitted). (Page 6, bottom).

Additionally, melt flow index is indicated as being a "key characteristic when setting mould flow conditions" for recycled polypropylene (The Consortium for Automotive Recycling and The British Plastics Federation, Recycled Plastic Specification – Generic Family A: Polypropylene, Derek Williams, April 28, 2000; page 4; **http://www.caregroup.org.uk/ppspec.pdf**; copy attached).

Finally, further evidence of the distinction between different melt-flow rate polymers is provided at **http://www.rco.on.ca/factsheet/fs_g03.html** ("Recyclable Materials: Recycling Tubs & Lids – 1994"; The Recycling Council of Ontario; copy attached), which states:

> To ensure recycled resin quality when recycling plastic, it is crucial that resin types with different molecular structures or viscosities not be mixed. (Page 1, fifth paragraph, emphasis added).

Accordingly, it is clear that those skilled in the art of plastics recycling do not consider polypropylenes having differing melt-viscosities to be recyclable together, in contrast to the Examiner's arguments to the contrary. As such, Applicants respectfully submit that the polypropylenes having different melt flow rates described in Ofosu et al., are not "the same, single polymer" for the purposes of the present claims, nor for the purpose of recycling, as proposed by the Examiner.

For the foregoing reasons, Applicants earnestly solicit withdrawal of the rejections and allowance of the claims.

Respectfully submitted,

THOMAS W. STEINBERG
ATTORNEY FOR APPLICANT
Registration No.: 37,013
Telephone: (302) 892-0887
Facsimile: (302) 892-7343

Dated: 5/18/05

TWS:fgl
Attachments:

"Plastics Recycling: What makes sense?" from E.B. Nauman & Associates.

"Packaging Materials: 3. Polypropylene as a Packaging Material for Foods and Beverages", Philip Tice, © 2002 International Life Sciences Institute, pp 5-6.

The Consortium for Automotive Recycling and The British Plastics Federation, Recycled Plastic Specification – Generic Family A: Polypropylene, Derek Williams, April 28, 2000; page 4.

"Recyclable Materials: Recycling Tubs & Lids – 1994"; The Recycling Council of Ontario.